

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference P200201060 WO | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416) | |
| International application No. PCT/DK 03/00685 | International filing date (day/month/year) 10.10.2003 | Priority date (day/month/year) 11.10.2002 |
| International Patent Classification (IPC) or both national classification and IPC B07C5/346 | | |
| Applicant FORCE TECHNOLOGY et al. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

I ☒ Basis of the opinion

II ☐ Priority

III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability



IV ☐ Lack of unity of invention

V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

VI ☐ Certain documents cited

VII ☐ Certain defects in the international application

VIII ☐ Certain observations on the international application

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Date of submission of the demand 19.04.2004 | Date of completion of this report 02.07.2004 |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized Officer Wich, R Telephone No. +49 89 2399-7517 <div style="text-align: right;">  </div> |

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/DK 03/00685**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-23 as originally filed

Claims, Numbers

1-24 as originally filed

Drawings, Sheets

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | 1-24 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | 1-24 |
| | No: Claims | |
| Industrial applicability (IA) | Yes: Claims | 1-24 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1 Independent system claim 1

- 1.1 Document EP-A-0 096 092 (D1), which is considered to represent the most relevant state of the art, discloses a system of automatically sorting objects according to the preamble of claim 1 from which the subject-matter of claim 1 differs in that the sensor device is based on Prompt Gamma-Newton Activation Analysis as defined in the characterizing portion of claim 1.
- 1.2 The subject-matter of claim 1 is therefore new (Article 33(2) PCT).
- 1.3 The problem to be solved by the present invention may be regarded as to provide for an alternative criteria used for sorting the objects.
- 1.4 The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) as no combination of the documents cited in the search report or the application renders obvious to use a sensor device based on Prompt Gamma-Newton Activation Analysis, comprising a neutron source for emitting neutrons, a moderator surrounding the source and the measurement space, moderating the emitted neutrons, a detector for detecting gamma radiation emitted by an object arranged in the measurement space, when being exposed to a neutron flux with a given energy distribution and generating a sensor signal, and that the control signal is generated on the basis of said sensor signal.

2 Independent method claim 13

- 2.1 The subject-matter is defined by method steps corresponding to the system according to claim 1.
- 2.2 For the reasons given under point 1 the subject-matter of claim 13 is also new and involving an inventive step.

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International application No. PCT/DK 03/00685

- 3 Claims 2-12 and 14-24 are dependent on claims 1 and 13, respectively, and as such also meet the requirements of the PCT with respect to novelty and inventive step.